## **ABSTRACT OF THE DISCLOSURE**

UBR traffic control apparatus and methods can control UBR bandwidth according to cell traffic state and congestion occurrence at the switch terminal. Preferred embodiments can include an egress subscriber terminal that monitors congestion of cells at the switch terminal and traffic state to generate UBR bandwidth information, and an ingress subscriber terminal that outputs UBR cells to the switch terminal according to the generated UBR bandwidth information. Preferred embodiments can increase or maximize UBR traffic by flexibly increasing, decreasing or maintaining UBR bandwidth in consideration of the cells' congestion experience at the switch terminal, the egress subscriber terminal's buffer threshold value and traffic load. By managing cell traffic state for each transmitting subscriber board and by determining subscriber boards to be controlled in consideration of the traffic state at the time of UBR bandwidth's increase or decrease, the preferred embodiments may improve the quality of UBR service.